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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------|-------------|----------------------|-------------------------|------------------|
| 09/560,234 | 04/28/2000 | Nobuyuki Takamori | 49799(801) | 3999 |
| 21874 | 7590 | 11/17/2003 | EXAMINER | |
| EDWARDS & ANGELL, LLP | | | CAO, ALLEN T | |
| P.O. BOX 9169 | | | ART UNIT | |
| BOSTON, MA 02209 | | | PAPER NUMBER | |
| | | | 2652 | |
| | | | DATE MAILED: 11/17/2003 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/560,234

Applicant(s)

TAKAMORI ET AL.

Examiner

Allen T Cao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 4-6 and 13-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-17 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. Applicant's election without traverse of Claims 1-3 and 7-12 in Paper No. 19 is acknowledged.
2. Claims 4-6 and 13-17 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Claims, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 19.
3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese (3-224182)/publication date 03-10-91.

Japanese ('182) discloses a disk cartridge 6 having an optical disk (7; here Japanese ('182) inherently discloses the disk can be an optical disk because Japanese ('182) discloses that the medium/disk can be used for an optical head and a magnetic head as taught in the abstract) for recording/reproducing information, and a cartridge case (see Constitution of the abstract, lines 1-2) rotatably accommodating the optical disk and being provided with a notch (27 and/or 35) on a side face thereof; wherein the notch allows an arm of a disk driving device to approach the optical disk when the disk cartridge is inserted in the disk driving device for recording/reproducing information through a head supported by the arm (Constitution of the Abstract, lines 6-8 teaches that "An optical head and a magnetic head are inserted into a window hole 10 from the front edge part 9 of the cartridge case through notches parts 35 and 27 to access the

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recording medium like a disk" which shows that the notches 27 and 35 **allow** an arm which carries an optical head **approaching** the medium/disk" as Applicant's claim language in claim 1.

Regarding claim 2, Japanese ('182) discloses that the optical disk 7 has a center hub at the center thereof (see figure 1). Japanese ('182) inherently discloses that the cartridge case having a counterbore (10a) formed in a recess form on an inside wall on a side opposite to a side where a drive shaft 1 for rotating the optical disk is inserted, the counterbore facing the center hub (see front page figures and figure 13).

Regarding claim 7, Japanese ('182) discloses that the cartridge case includes an upper case and a lower case having an upper opening and a lower opening, respectively, for allowing the head for recording/reproducing information to face the optical disk and a shutter 11 for opening and closing the upper and lower openings, the lower case is cut to form the lower opening from a bottom face to a side face, and the shutter shields the upper opening along a plane defined by an upper face of the upper case and shields the lower opening along two planes defined by the bottom face and the side face of the lower case (figures 1, 11 and 12).

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese ('182).

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Regarding claim 3, Japanese ('182) does not disclose that the cartridge case has a thickness less than 5 mm and an area smaller than 65 mm square, and the optical disk has a diameter less than 64 mm and a thickness less than 0.8 mm and forms a track having a pitch less than 0.6 μm so that the optical disk allows information of 650 MB or more to be recorded thereon.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the disk cartridge of Japanese ('182) which has a thickness less than 5 mm and an area smaller than 65 mm square, and the optical disk has a diameter less than 64 mm and a thickness less than 0.8 mm and forms a track having a pitch less than 0.6 μm so that the optical disk allows information of 650 MB or more to be recorded thereon.

The rationale is as follows: Firstly, one of ordinary skill in the art would have been motivated to modify the cartridge of Japanese ('182) having a thickness less than 5 mm and an area smaller than 65 mm square, and the optical disk has a diameter less than 64 mm and a thickness less than 0.8 mm and forms a track having a pitch less than 0.6 μm so that the optical disk allows information of 650 MB or more to be recorded thereon through routine lab experimentation and optimization in order to reduce size and thickness of the cartridge in order to reduce size and thickness of the disk driving system. Secondly, Japanese ('182) teaches that the notche parts thinner than the overall thickness of the cartridge case which inherently teaching reducing size and thickness of the cartridge and Japanese ('182) further discloses that the disk driving device is made small-sized and low cost. Finally, With respect to the limitation of the

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thickness, area of the cartridge case and the diameter, thickness of the disk cannot be a basis for patentability, since where patentability is said to be based upon particular chosen dimensions or upon another variable recited in a claim, the applicant must show that the chosen dimensions are critical. In re Woodruff, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

7. Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese ('182) in view of Fujisawa (US. 6,137,77).

Regarding claims 8-11, Japanese ('182) discloses that the shutter 11 includes an upper shutter portion and a lower shutter portion for shielding the upper and lower openings, a perpendicular portion joining the upper and lower shutter portions. However, Japanese does not clearly disclose that the shutter has a pawl for preventing the shutter from coming off and a guide portion extending from the perpendicular portion for slidably guiding the shutter, and the upper case is sandwiched between the guide portion and the upper shutter portion.

Fujisawa discloses a disk cartridge having a shutter has a pawl (18, 19, 21, 26) for preventing the shutter from coming off and a guide portion (17, 25) extending from the perpendicular portion for slidably guiding the shutter, and the upper case is sandwiched between the guide portion and the upper shutter portion as recited in claims 8-11. Regarding claim 12, Fujisawa also discloses that the shutter is restricted in a direction perpendicular to a moving direction of the shutter by the pawl and the perpendicular joining the upper shutter portion and the lower portion.

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It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the shutter and the cartridge of Japanese ('182) with such pawl and guide portion as set forth, supra as taught by Fujisawa in order to be controlled I its sliding movement and prevented from accidental extrication.

Response to Arguments

8. Applicant's arguments with respect to claims 1-3 and 7-12 have been considered but are moot in view of the new ground(s) of rejection.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen T Cao whose telephone number is (703) 305-3796. The examiner can normally be reached on Tue - Fri (7:30 - 6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4750.



Allen Cao
Primary Examiner

AC
November 7, 2003